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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,457	10/19/2000	William Hsiao-Yu Ku	AUS9-2000-0370-US1	7542
35525	7590	06/30/2005	EXAMINER	
IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			VO, LILIAN	
			ART UNIT	PAPER NUMBER
			2195	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/690,457

Applicant(s)

KU ET AL.

Examiner

Lilian Vo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 6, 7, 9, 10, 15 - 17 and 22 - 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 7, 9, 10, 15 - 17 and 22 - 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

1. Claims 1, 6, 7, 9, 10, 15 – 17 and 22 – 32 are pending. Claims 2 – 5, 8, 11 – 14, and 18 – 21 have been cancelled.

2. In view of the appeal brief filed on 3/23/05, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1, 6, 7, 9, 10, 15 – 17 and 22 – 32 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter.

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5. **Claims 1, 6, 7, 9, 24, 25 and 26** are directed to method steps, which can be practiced mentally in conjunction with pen and paper, therefore they are directed to non-statutory subject matter. Specifically, as claimed, it is uncertain what performs each of the claimed method steps. Moreover, each of the claimed steps, inter alias, determining, monitoring, altering, removing, installing, detecting, prompting, removing, correcting, can be practiced mentally in conjunctions with pen and paper. The claimed steps do not define a machine or computer implemented process [see MPEP 2106]. Therefore, the claimed invention is directed to non-statutory subject matter. (The examiner suggests applicant to change “method” to “computer implemented method” in the preamble to overcome the outstanding 35 U.S.C. 101 rejection).

6. **Claims 10, 15, 16, 30, 31 and 32** are not limited to tangible embodiments. In view of applicant’s disclosure, specification page 10, line 23 – page 11, line 5, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g. floppy disc, a hard disk drive, a RAM and a CD-ROMs) and intangible embodiments (e.g. signal bearing media, transmission-type media such as digital and analog communication links). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

7. Regarding **claims 17, 27, 28 and 29**, the system is at best a software system, per se, failing to be tangibly embodied or include any recited hardware as part of the system.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 10, 17, 24, 26, 27, 29, 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hussey (US Pat. Application Publication 2005/0086641).

10. Regarding **claim 1**, Hussey discloses a method for correcting a path sequence of an environment variable in a data processing system, the path sequence specifying an order for searching directories for locating executable code within the data processing system, the method comprising:

monitoring the data processing system for a change effecting the path sequence of the environment variable, wherein the environment variable is enabled and being used by the data processing system to specify the order for searching the directories within the data processing system (page 4, paragraphs 48, 49, 54, 56, 57 and 59, page 5, paragraph 64).

Hussey discloses the step of altering the path sequence of the environment variable to ensure that a proper file is found and used when selected by one of a user and a running application program in the cases where users move files and/or folders and renames files (page 3, paragraph 39 and fig. 3). Hussey did not clearly disclose the step of determining whether any duplicate files exist in the any of the directories identified by the path sequence. However, Hussey discloses that a determination is made to see if new operating system has been installed or an OS has been reinstalled which can affects the proper functioning of the application module (page 6, claim 17). It would have been obvious to one of an ordinary skill in the art, at the time the invention was made, that if Hussey's system determines an operating system has been

reinstalled, there would be duplicate files exist in the other directories which have been renamed by the users.

11. **Claims 10 and 17** are rejected on the same ground as stated in claim 1 above.

12. Regarding **claim 24**, Hussey discloses a method for managing environment variables in a data processing system, comprising data processing system implemented steps of:

automatically invoking upon occurrence of at least one of the occurring events (abstract, page 4, paragraph 56, 57, 58, 59) a) a directory is deleted (page 3, paragraphs 39 and 44: folder has been moved. Page 4, paragraphs 48 and 49); b) a product is uninstalled on the data processing system (page 4, paragraphs 48, 49, 54); and c) a given environment variable is manually modified by a user (page 3, paragraphs 39 and 44, page 4, paragraphs 48 and 49);

determining, if any occurring event a), b) or c) causes a modification to an affected path sequence of any presently active environment variable, the path sequence specifying an order for searching directories for locating executable code within the data processing system (page 3, paragraph 39, page 4, paragraphs 48, 49, 54, 56 and 57).

automatically correcting the affected path sequence if it is determined that the occurring event causes the modification (page 3, paragraph 39, page 4, paragraph 51).

With respect to the environment variable manager, Hussey discloses that when a certain changes as stated above occur, a program module may not be able to function properly because the registry keys it uses may no longer be valid, a system is automatically updating the registry when the program module is booted so that the paths contained in the registry remain valid (page 3, paragraph 39). Therefore, it would have been obvious to one of an ordinary skill in the art, at

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the time the invention was made to relate the concept of environment variable manager as claimed to the step of automatically updating the operating environment with valid paths since it appears that Hussey's invention would perform the functions equally well as the environment variable manager as claimed.

13. Regarding **claim 26**, Hussey discloses a method for managing environmental variables in a data processing system, comprising data processing system implemented steps of:

determining if a directory, specified by a path sequence of any environment variable, is deleted, wherein the path sequence specifies an order for searching directories for locating executable code within the data processing system (page 3, paragraphs 39 and 44: the moving and renaming of folders/directories causes the program module to be function improperly).

With respect to the step of enabling at least one of the following: a) an automatic deletion of the directory from the path sequence of the environment variable; and b) a display of an interface to inform the user to delete the directory from the path sequence of any affected environment variables, Hussey discloses that when a certain changes as stated above occur, a program module may not be able to function properly because the registry keys it uses may no longer be valid, a system is automatically updating the registry when the program module is booted so that the paths contained in the registry remain valid (page 3, paragraph 39). Therefore, it would have been obvious to one of an ordinary skill in the art, at the time the invention was made, to recognize that the directory from the path sequence of the environment variable is being deleted because the old directories in the environment variables is being replaced/changed to the new names and/or new locations as appropriate when the automatically updating step is performed.

14. **Claims 27, 29, 30 and 32** are rejected on the same ground as stated in claims 24 and 26 above.

15. Claims 6, 7, 9, 15, 16, 22, 23, 25, 28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hussey (US Pat. Application Publication 2005/0086641), in view of Hove et al. (US 6,564,369, hereinafter Hove).

16. Regarding **claims 6 and 7**, Hussey discloses a method for automatically updating a registry when an application program module is booted (abstract). Hussey did not clearly teach the step of removing references to all but one of the duplicate files in the path sequence of the environment variable that is selected by a user. Nevertheless, this limitation is taught by Hove, in which a conflict checking system detects duplicate files and allows the user to move or remove the duplicate files to prevent future problems (col. 7, lines 1 – 39). Therefore, it would have been obvious for one of an ordinary skill in the art, at the time the invention was made to combine the teachings of Hussey with Hove to avoid problem by preventing unnecessary duplication of files and/or folders during software installation or upgrade.

17. Regarding **claim 9**, Hussey teaches a method for correcting modifications that have made to an environment variable during installation of software in a data processing system, the method comprising:

installing the software on the data processing system for subsequent execution by the data processing system (page 1, paragraphs 4, 8, 9 and page 6, claim 17);

detecting that an environment variable has been modified during the installing step (page 1, paragraphs 4, 8, 9, page 3, 39, page 6, claim 16 and page 6, claim 17).

Hussey did not clearly disclose the steps of determining and removing the duplicate or incorrect version files and prompting the user to select a correct one of the duplicate files. However, Hussey discloses that a determination is made to see if new operating system has been installed or an OS has been reinstalled which can affects the proper functioning of the application module (page 6, claim 17). It would have been obvious to one of an ordinary skill in the art, at the time the invention was made, that if Hussey's system determines an operating system has been reinstalled, there would be duplicate files exist in the other directories which have been renamed by the users. Furthermore, Hove discloses a conflict checking system detects duplicate files and allows the user to move or remove the duplicate files to prevent future problems (col. 7, lines 1 – 39). Therefore, it would have been obvious for one of an ordinary skill in the art, at the time the invention was made to combine the teachings of Hussey with Hove to avoid problem by preventing unnecessary duplication of files and/or folders during software installation or upgrade.

18. **Claims 15, 16, 22 and 23** are rejected on the same ground as stated in claims 6 and 7 above.

19. Regarding **claim 25**, Hussey discloses a method for managing environment variables in a data processing system, comprising data processing system implemented steps of:

automatically invoking whenever a path sequence for a presently active environment variable is modified in the data processing system, wherein the path sequence specifies an order

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for searching directories for locating executable code within the data processing system (page 3, paragraphs 39 and 44, page 4, paragraphs 48 and 49, 54).

With respect to the environment variable manager, Hussey discloses that when a certain changes as stated above occur, a program module may not be able to function properly because the registry keys it uses may no longer be valid, a system is automatically updating the registry when the program module is booted so that the paths contained in the registry remain valid (page 3, paragraph 39). Therefore, it would have been obvious to one of an ordinary skill in the art, at the time the invention was made to relate the concept of environment variable manager as claimed to the step of automatically updating the operating environment with valid paths since it appears that Hussey's invention would perform the functions equally well as the environment variable manager as claimed.

With respect to the step of determining whether any duplicate files exist in the any of the directories identified by the path sequence, Hussey discloses the step of altering the path sequence of the environment variable to ensure that a proper file is found and used by a running application program in the cases where users move files and/or folders and renames files (page 3, paragraph 39 and fig. 3). Hussey further discloses that a determination is made to see if new operating system has been installed or an OS has been reinstalled which can affects the proper functioning of the application module (page 6, claim 17). It would have been obvious to one of an ordinary skill in the art, at the time the invention was made, that if Hussey's system determines an operating system has been reinstalled, there would be duplicate files exist in the other directories which have been renamed by the users.

Hussey did not clearly teach the step of enabling a display of each environment variable determined to have duplicate files in the directories specified by the path sequence to a user for

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correction. Nevertheless, this limitation is taught by Hove, in which a conflict checking system detects duplicate files and allows the user to move or remove the duplicate files to prevent future problems (col. 7, lines 1 – 39). Therefore, it would have been obvious for one of an ordinary skill in the art, at the time the invention was made to combine the teachings of Hussey with Hove to avoid problem by preventing unnecessary duplication of files and/or folders during software installation or upgrade.

20. **Claims 28 and 31** are rejected on the same ground as stated in claim 25 above.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is 571-272-3774. The examiner can normally be reached on Monday - Thursday, 7:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist at 571-272-2100.

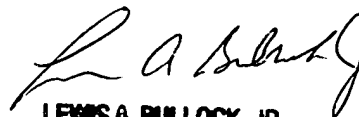
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lilian Vo  
Examiner  
Art Unit 2127

lv  
June 23, 2005



**LEWIS A. BULLOCK, JR.**  
**PRIMARY EXAMINER**